

The background image is a landscape photograph. In the foreground, there is a lush green field with some yellow wildflowers. A dark fence post is visible on the right side. In the middle ground, there is a line of trees. In the background, a large wildfire is burning, with thick orange and yellow smoke rising into the sky. The sun is visible through the smoke, creating a bright, hazy glow.

Mitigation of Invasive Species

“The War on Cheatgrass”

A Bill to Improve Land Health
and Limit Catastrophic Wildfires



Cheat Grass and Wildfires

Cheat grass can take over a landscape and result in increased wildfires ... is this the future of Utah's wild lands?



Scope of the Problem

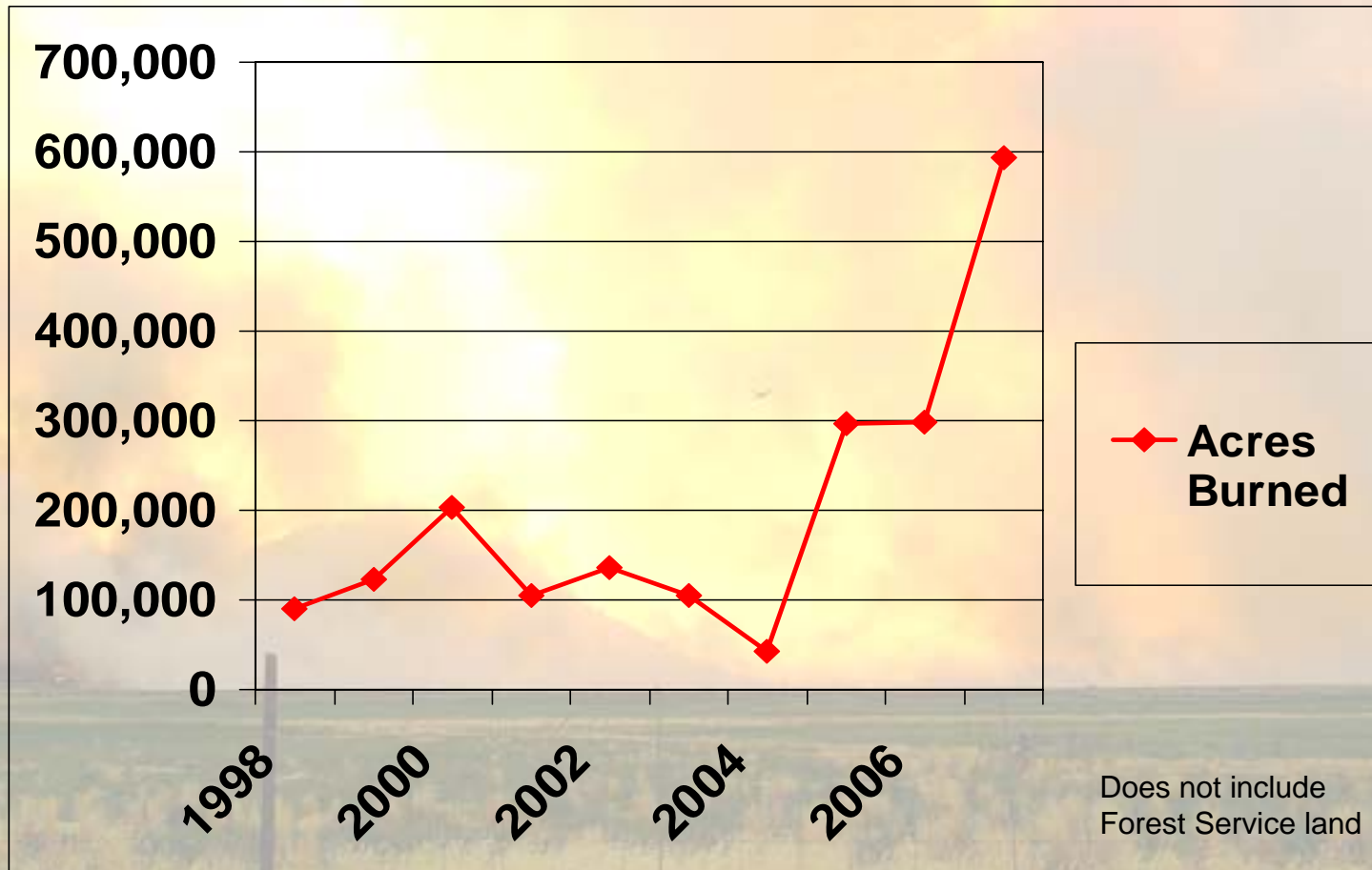
Size of Wildfires are Increasing,

Resulting in Increasing:

- Fire suppression and rehabilitation costs
- Impacts to:
 - Air quality and public safety
 - The environment
 - Wildlife habitat
 - Agriculture and rural economies

Wildfire Acres per Year

Bureau of Land Management; Bureau of Indian Affairs; Fish and Wildlife Service; National Parks Service; State/private; Other



1998
89431

1999
123031

2000
202808

2001
104741

2002
136292

2003
104164

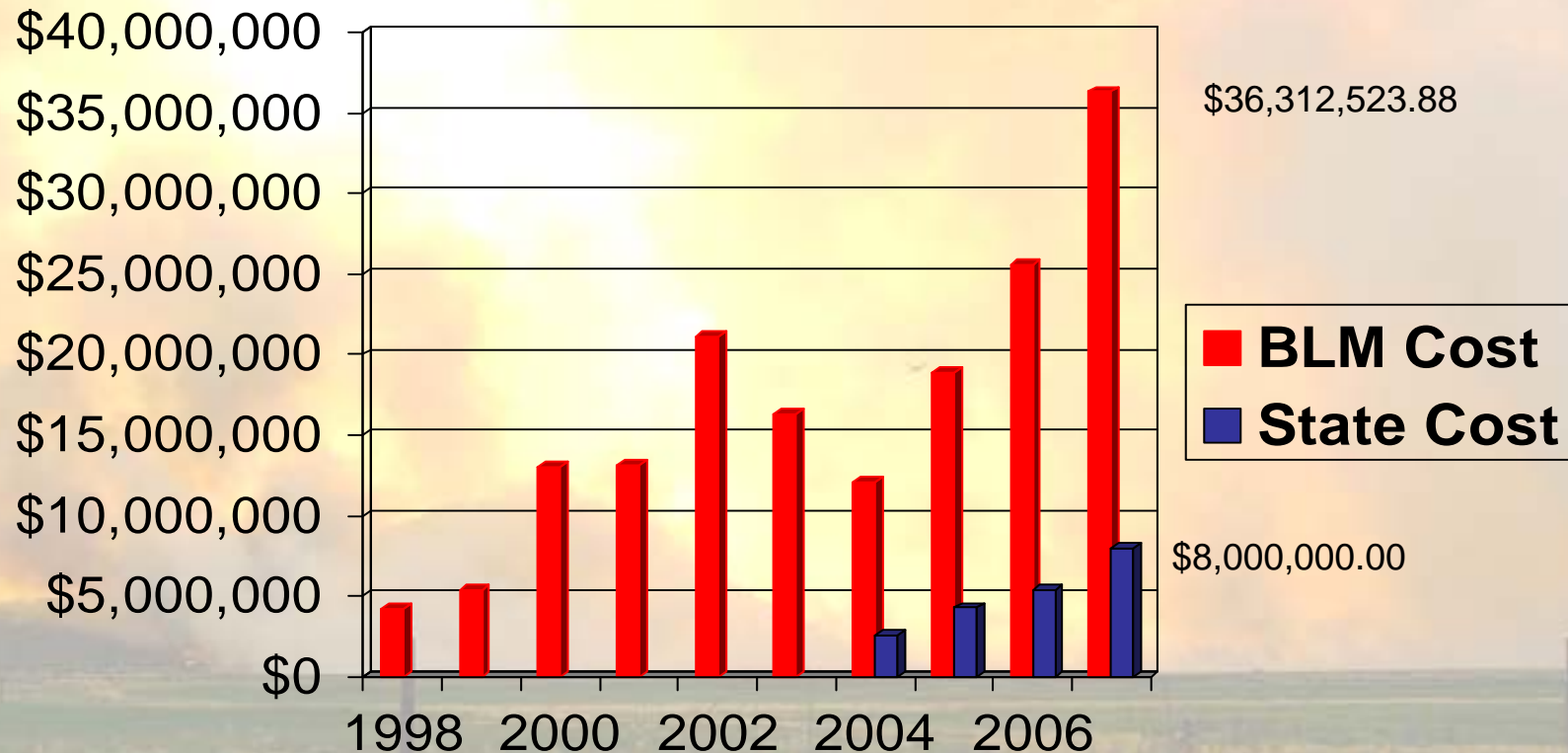
2004
43,000

2005
297530

2006
298675

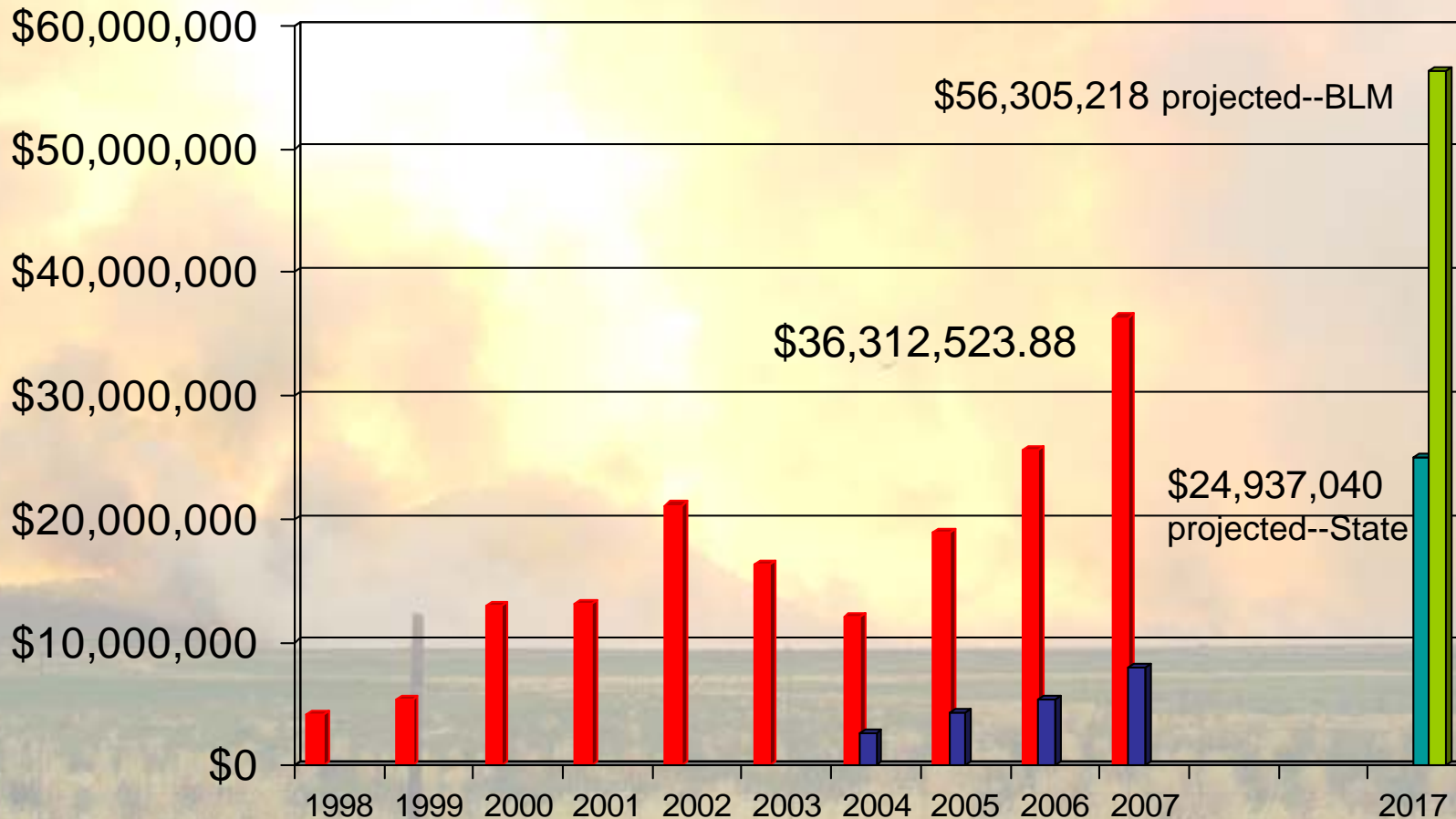
2007
593210

BLM and State Fire Suppression & Rehabilitation Costs-Utah



Sources: Bureau of Land Management
Utah DNR

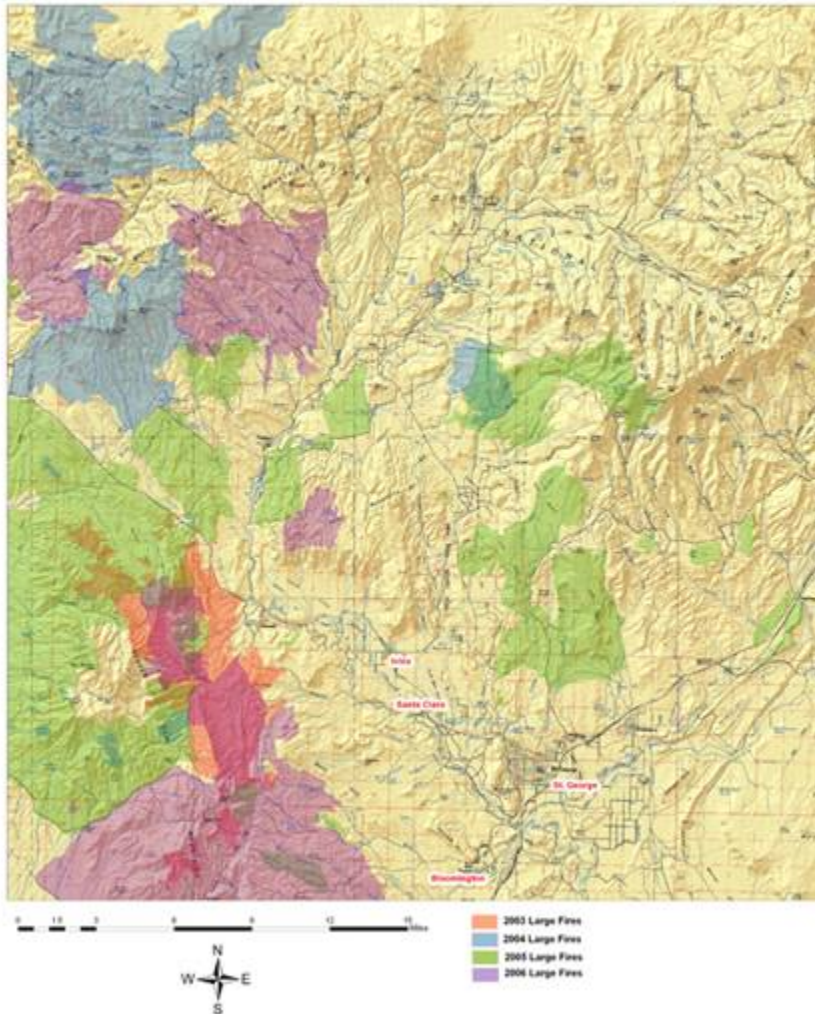
BLM & State Fire Suppression & Rehabilitation Costs-Utah Projected to 2017



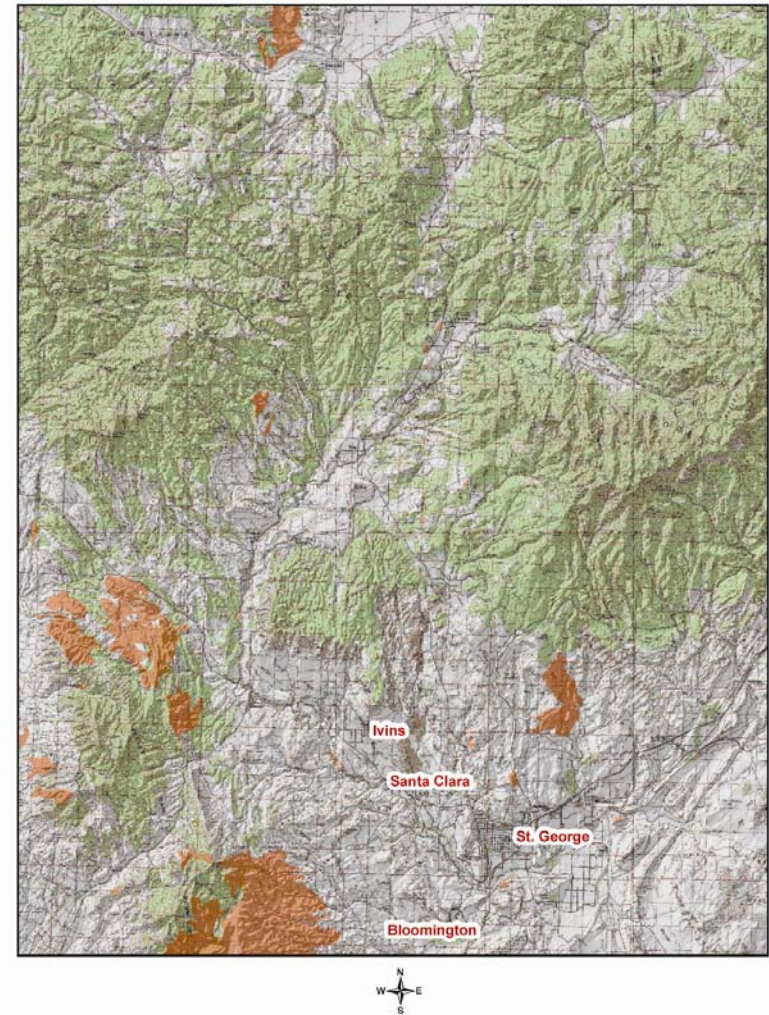
Washington County

Fire Progression

Western Washington County, Utah
Large Fire History 2003 - 2006



Western Washington County, Utah
Large Fire History 1993 - 2002



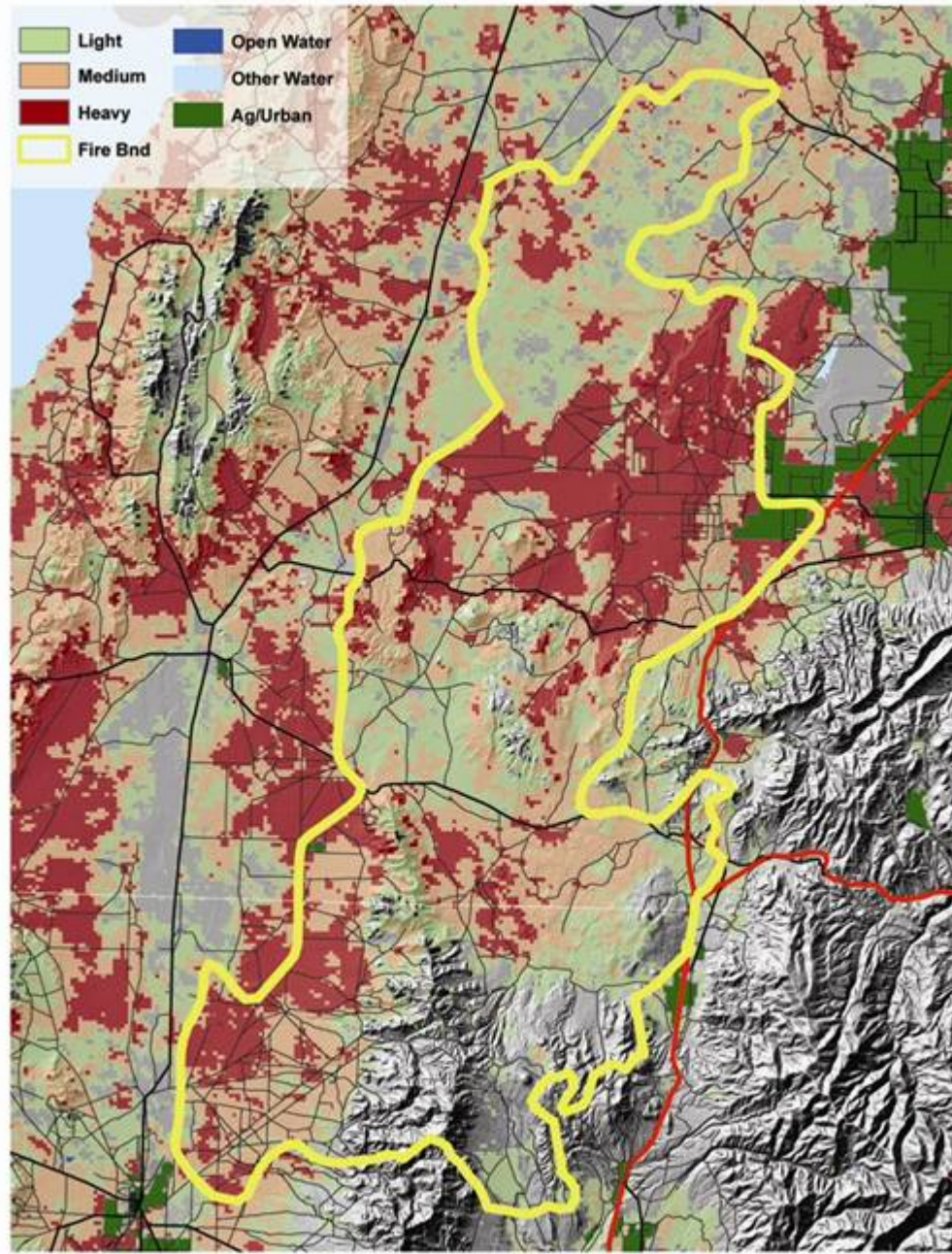
Fire Cycle

How often will various landscapes burn?

- Fire Return Interval
 - Upland Steppe and Sage Brush: 27-40 years
 - Pinion-Juniper: up to 100 years
 - Cheatgrass Landscape: 2-3 years
 - After 2-3 burn cycles, the native grasses will not return.

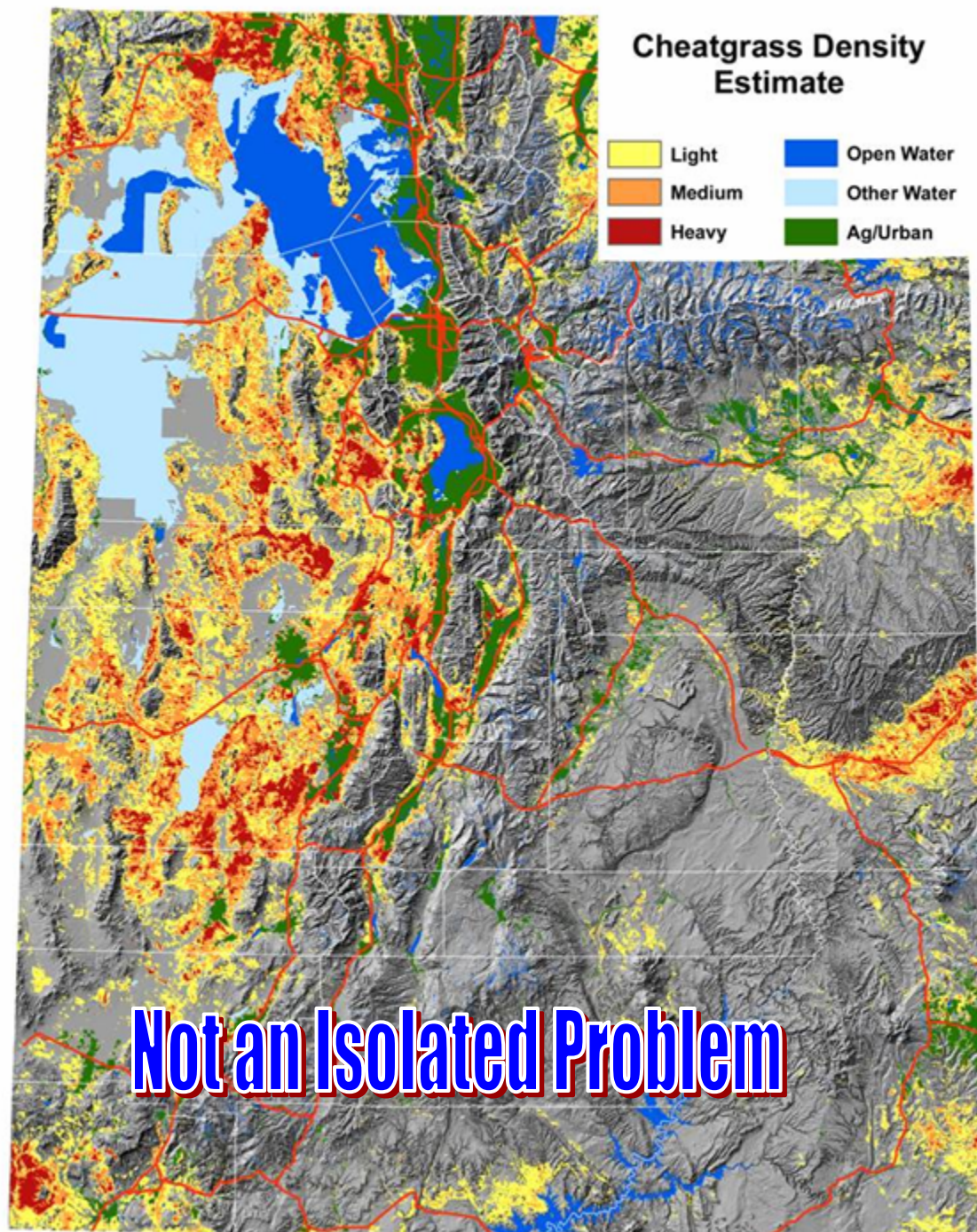
Source: Sheldon Wimmer, BLM, Utah

Cheatgrass Density Estimate Milford Flat



Milford flat
cheatgrass
density in 2005,
with the 2007
fire area
outlined in
Yellow.

Map courtesy:
Utah State University

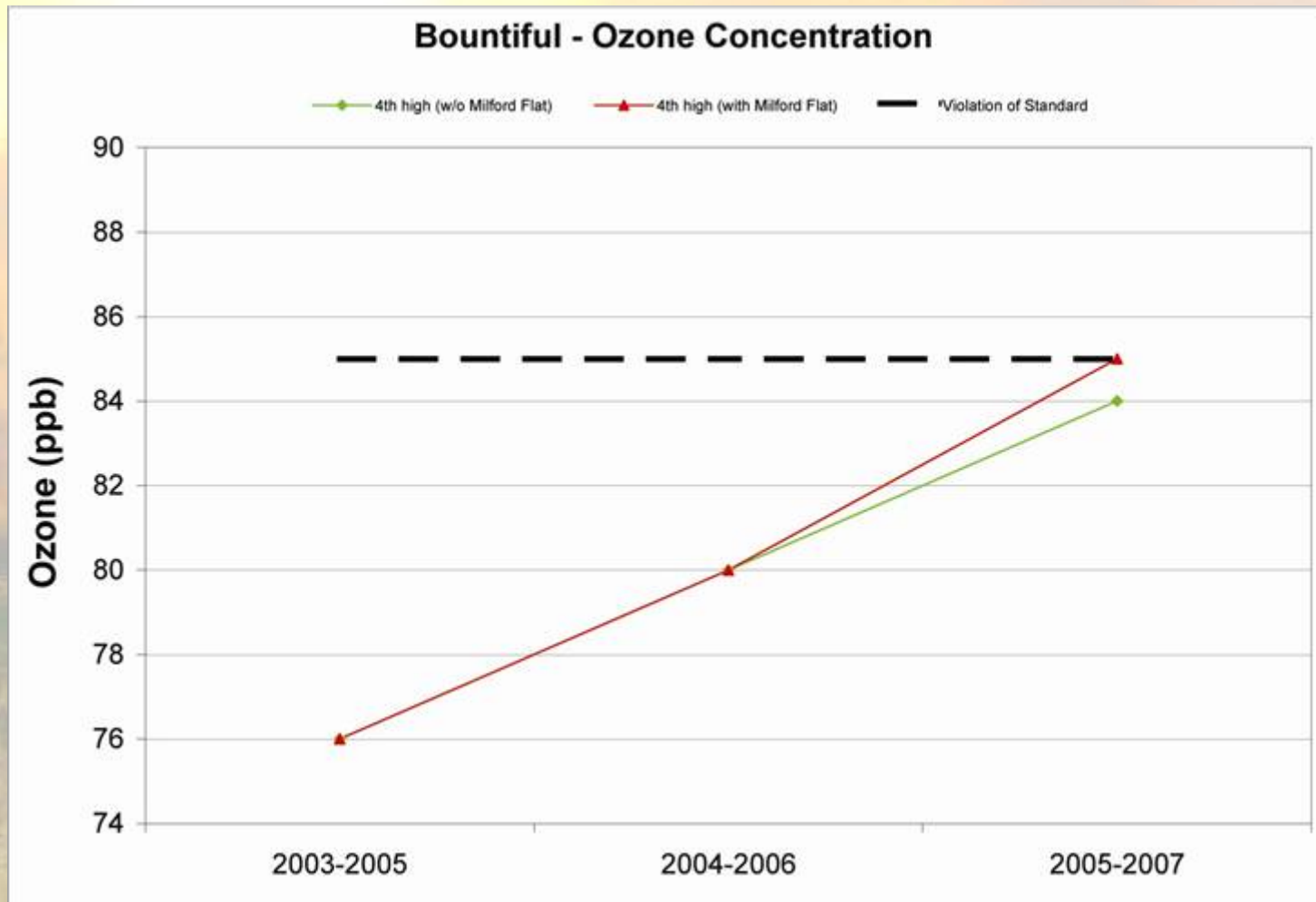


Map courtesy:
Utah State University

Environmental Impacts

Quality of Life

- Ozone
 - 2007 fires put Utah over EPA standard



Environmental Impacts

PM10 and PM 2.5 Releases

- 2005—Wildfires statewide= 2,077 tons PM10
- 2007—Milford Flat fire only= 3,267 tons PM10
- PM 2.5 releases from the Milford flat fire = to 53% of total PM 2.5 releases from Utah's 2-mill. automobiles all year. It was like adding 1-mill. cars.



Other Impacts

- Farmers and ranchers
- Local businesses, including summer tourism
- Sage Grouse and other threatened species, loss of habitat

Photo courtesy: Salt Lake Tribune,
July 28, 2007



Angela Bradshaw herds cattle away from the Milford Flat Fire in the Mineral Range south of Cove Fort earlier this month.

Is This Acceptable?

Ash and soil from Milford Flat fire being carried in the wind northward over I-15 and Wasatch urban areas

Solutions



To Conduct a War on Cheatgrass

- Must make the 'War' a priority
- Must use the best plant materials & science
- Must be proactive by limiting size of future wildfires
- Must be an ongoing commitment

Some plants can establish and compete with cheatgrass

Case in point -- Asay, Horton, Jensen, and Palazzo. 2001. Merits of native and introduced Triticeae grasses on semiarid rangelands. Canadian Journal of Plant Sci. 81:45-52.



Forage Kochia



Forage kochia slows spread of range fires

Twin Peaks test plots following 1986 fire



Photograph showing where the Milford Flat fire (2007) burned up to the forage kochia and stopped.

Range Management

- Work to improve range management:
 - Agencies, permittees, biologists, recreationists, etc.
- Use existing tools, develop new ones where needed
 - Infrastructure of the UtahPCD
 - Grazing Improvement Program
 - Watershed Restoration Initiative
 - Federal Programs

The Cost of Doing Nothing

- **Increase in air pollution and health impacts**
- Increase in Cheatgrass dominated rangelands
- Increase in fire frequency and intensity
- Increase in fire suppression costs
- Increase in loss of property and impacts to ranchers and rural communities
- Increase the risk of federal listing of wildlife species; e.g, sage grouse

Priorities

1. Public Health and Safety
2. Environmental Benefits
3. Rural Economies
4. Livestock and Wildlife Habitat

The Necessary Arsenal

- UCC/UtahPCD
 - Infrastructure
 - Inter-agency teams of experts
 - State, federal, local and private
 - Science and Technology
 - Inter-disciplinary experts
 - Rangeland, wildlife, agronomy, administrative
- Funding?

Call to Arms

- We must declare war on cheatgrass
 - Our current skirmishes are not sufficient
 - We must INVEST the necessary resources
- SB 89
 - “Mitigation of Invasive Species”

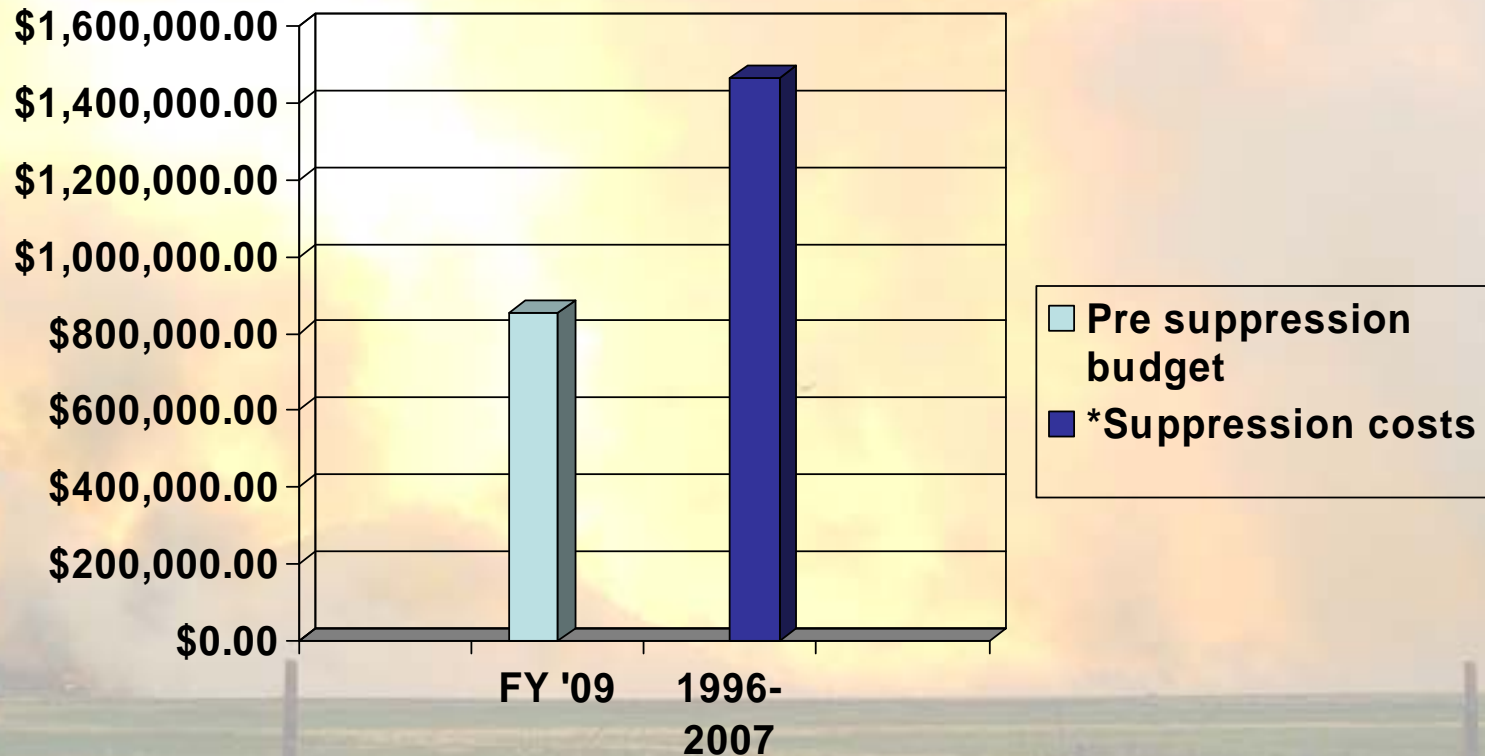
Dennis Stowell, sponsor

Promontory Project Example

- Project planners and participants
 - DWR,
 - NRCS,
 - USFWS,
 - UGIP, UACD,
 - Fire and State Lands,
 - Golden Spike, Thiokol, Scott Sandall, Frank Rees, Kellers, QRM, Fort Ranch, Youngs, Chournos's, Rattlesnake CWMU, Forestry Box Elder County, Box Elder County Fire Marshall



Pay Now or Pay Later



* This figure represents fire suppression costs and some physical damages. It does not include emergency stabilization or rehabilitation, which can cost 2-3 times the amount of suppression.

Additional Information

To view this presentation and additional information about the War of Cheatgrass,

Visit the Utah Department of Agriculture and Food website:

www.ag.utah.gov